AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1 and 2. (Cancelled)

3. (Previously Presented) The filter of claim 8, wherein each of the upper layer region and the lower layer region comprises a plurality of layers.

4. (Previously Presented) The filter of claim 3, wherein a plurality of layers in the upper layer region comprises layers that include different materials, and a plurality of layers in the lower layer region comprises layers that include different materials.

5. (Previously Presented) The filter of claim 8, wherein at least one of the upper layer region and the lower layer region comprises an acoustic mirror, the acoustic mirror comprising at least two alternating layers having different acoustic impedances.

6. (Previously Presented) The filter of claim 5, wherein at least one layer of the acoustic mirror comprises an electrode layer.

7. (Previously Presented) The filter of claim 8, wherein there is an air gap between at least one of the resonators and the multilayer substrate.

8. (Currently Amended) A filter comprising resonators for use with bulk acoustic waves, each of the resonators for use with bulk acoustic waves comprising:

a lower layer region comprising a first electrode;

an upper layer region comprising a second electrode; and

a piezoelectric layer between the first electrode and the second electrode;

wherein two of the resonators are in a stacked crystal filter arrangement, the two of the resonators comprising two bulk acoustic wave resonators, the stacked crystal filter arrangement of the two bulk acoustic wave resonators comprising:

piezoelectric layers between ~~the first~~ an upper electrode in the stacked crystal filter arrangement and ~~the second~~ a lower electrode in the stacked crystal filter arrangement; and

a ~~third~~ shared electrode among the piezoelectric layers in the stacked crystal filter arrangement;

wherein an additional resonator is connected to the stacked crystal filter arrangement so that a combination of the two resonators and the additional resonator form an element of a lattice-type filter or a ladder-type filter, the additional resonator comprising a bulk acoustic wave resonator or an inductive-capacitive (LC) resonator;

a capacitor in series or in parallel with one of the two resonators in the stacked crystal filter arrangement, and

a multilayer substrate, wherein the capacitor is integrated into the multilayer substrate, the capacitor comprising structured metal layers within the multilayer substrate.

9. (Previously Presented) The filter of claim 8, wherein the additional resonator is an LC resonator.

10. (Previously Presented) A duplexer comprising a filter according to claim 8.

11. (Cancelled)

12. (Previously Presented) The electrical circuit of claim 15, wherein an electrode of the second resonator is connected to ground.

13 and 14. (Cancelled)

15. (Currently Amended) An electrical circuit comprising:

a substrate;

a stack of resonators;

an acoustic mirror between the substrate and the stack of resonators;

wherein the stack of resonators comprises:

first resonators that operate with bulk acoustic waves, the first resonators comprising an upper resonator and a lower resonator, the upper resonator and the lower resonator comprising upper and lower electrodes; and

a coupling layer between an upper electrode of the lower resonator and a lower electrode of the upper resonator;

a second resonator comprising electrodes;

wherein the upper electrode of the lower resonator and the lower electrode of the upper resonator are electrically connected to an electrode of the second resonator;

wherein the electrical circuit further comprises a capacitor in parallel with at least one of the resonators or in series with at least one of the resonators;

wherein the substrate comprises a multilayer substrate; and

wherein the capacitor is integrated into the multilayer substrate, the capacitor comprising structured metal layers within the multilayer substrate.

16. (Cancelled)

17. (Previously Presented) The filter of claim 8, wherein, for at least one of the resonators for use with bulk acoustic waves, an upper layer region and a lower layer region comprises a plurality of layers.

18. (Previously Presented) The filter of claim 17, wherein a plurality of layers in each upper layer region comprises layers that include different materials, and a plurality of layers in each lower layer region comprises layers that include different materials.

19. (Previously Presented) The filter of claim 8, wherein each upper layer region and each lower layer region comprises an acoustic mirror, each acoustic mirror comprising at least two alternating layers having different acoustic impedances.

20. (Previously Presented) The filter of claim 19, wherein at least one layer of each acoustic mirror comprises an electrode layer.

21. (Previously Presented) The filter of claim 17, wherein there is an air gap between at least one of the resonators and the multilayer substrate.

22. (Previously Presented) A duplexer comprising a filter according to claim 9.

23. (Previously Presented) The electrical circuit of claim 15, wherein the second resonator comprises a single resonator, the single resonator comprising a lower electrode, an upper electrode, and a piezoelectric layer between the upper electrode and the lower electrode.

24 and 25. (Currently Amended)

26. (Previously Presented) The filter of claim 8, wherein the additional resonator comprises at least one passive inductive component and at least one passive capacitive component.